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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/726,654 | 12/04/2003 | Timo Viero | 60091.00264 | 6165 |

32294 7590 03/21/2007
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| EXAMINER |
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VLAHOS, SOPHIA

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| ART UNIT | PAPER NUMBER |
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2611

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 03/21/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/726,654

Applicant(s)

VIERO ET AL.

Examiner

SOPHIA VLAHOS

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/04/2003
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Drawings

1. Figures 1-2, 5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Figure 6 is objected to because block 614, is labeled as "Froming Clipped Signal" this should be corrected as "Forming Clipped Signal". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top

margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The abstract (received on 12/04/2003) of the disclosure is objected to because it includes a "(Figure 7)" (that should be removed). Correction is required. See MPEP § 608.01(b).

Claim Objections

3. Claims 22-23, 9, 30 are objected to because of the following informalities:

With respect to claims 22-23 both claims recite the following limitation: "...means **(704, 706)**..." the emphasized part should be removed.

With respect to claims 9, 20, both claims recite the following limitation: "... (peak to average ratio, crest factor)..." that is unnecessary and should be removed.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 1, claim 1, (line 5 after the preamble) recites: "...comparing the values of each block with the set threshold value..." where it is understood that each block includes chips, but it is not clear what "the values of each block" actually refer to (the amplitude value or power value ?).

Claim 1, lines 17-18, recite: "...with **the** set objectives..." there is lack of antecedence basis since no reference to "set objectives" is mentioned previously in the claim.

Similarly line 19 recites: "...for **the** selected downlink transmissions..." lacking antecedence basis since no reference to "selected downlink transmission" is mentioned previously in the claim.

Line 23, recites: "...**the** examined block..." lacking antecedence basis since no reference to an already mentioned "examined block" is found in the claim.

Claim 2, line 5, recites: "...comparing the values of each block with the set threshold value..." where it is understood that each block includes chips, but it is not clear what "the values of each block" actually refer to (the amplitude value or power value ?).

Claim 4, recites: "...**by calculating the input of vectors** using the block where the threshold value was exceeded and a pre-determined number of channelization codes..." where the emphasized part is incomprehensible and should be revised to clarify its meaning.

Claim 10, recites: "...by the selected spreading factor...." lacking antecedence basis since claim 1 does not mention a "selected spreading factor...".

Claim 11, recites: "...wherein the weighting coefficients of the combined signal are defined for the codes." Here it should be clarified whether the "weighting coefficients" of claim 11 refer to the first or second or both the first and second weighting coefficients of claim 1. Also the limitation : "... the weighting coefficients....are defined for the codes." (where the codes should be the channelization codes). It is recommended that the term "defined" should be replaced with "determined" since claim 1 mentions "...to determine first coefficients..." (lines 11-12 of claim 1) and "...determined second coefficients..." (line 18 of claim 1).

Claim 12 includes a similar limitation as claim 11, "coefficients...defined for" and should be revised accordingly.

Claim 13 recites: "...wherein the signal to be added to the combined signal is an orthogonal signal" lacking antecedence basis since claim 2 does not mention a "signal to be added to a combined signal...".

Claim 15 recites a similar limitation to the one lacking antecedent basis found in claim 13 and should be revised accordingly.

Apparatus claims 22, 23, 25, 31-33, 34 are also rejected since they contain limitations with similar problems as those pointed out above for method claims 1, 2, 4, 10-13 respectively.

Dependent method claims 3, 5-9, 14-21 and dependent apparatus claims 24, 26-29, 35-42 are also rejected since they at least contain limitations of their respective rejected method and apparatus independent claims.

Allowable Subject Matter

6. Claims 1,2, 22, 23 (and the corresponding dependent claims) would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

7.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SOPHIA VLAHOS whose telephone number is 571 272 5507. The examiner can normally be reached on MTWRF 8:30-17:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammed Ghayour can be reached on 571 272 3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SV
3/16/2007


MOHAMMED GHAYOUR
SUPERVISORY PATENT EXAMINER